

Mobility Plaza®

Exploring the global mobility shift

Shared mobility, cleaner transportation, charging, smart cities, and autonomous technology are transforming the mobility landscape across the world.



In an era defined by rapid technological advancements, urbanization, and environmental concerns, the global transportation landscape is undergoing a profound transformation. The mobility revolution, characterized by shifts towards sustainable and technologically advanced modes of transportation, is reshaping the way people and goods move around the world. From the rise of electric vehicles and autonomous driving technology to the proliferation of shared mobility services and the emergence of smart cities, the mobility revolution is driving innovation, connectivity, and sustainability in transportation systems worldwide.

Worldwide, 1.3 billion vehicles are now in use, and many of these are privately owned. There are 868 vehicles per 1,000 capita in the United States, 635 in Norway, and 391 in Mexico. China, by comparison, has only 219 per 1,000 capita, but that still accounts for more than 300 million vehicles on the road. Private cars were still the most popular mobility mode (45%) in 2022, followed by traditional public transport (23%), microbility (16%), and walking (14%). Service stations are adapting

to these changes by developing flexible mobility hubs that focus on people and not cars.

EVs continue expansion

Electric car sales keep rising and could reach around 17 million in 2024, accounting for more than one in five cars sold worldwide, according to the [latest report](#) by the International Energy Agency (IEA).

Tight margins, volatile battery metal prices, high inflation, and the phase-out of purchase incentives in some countries have sparked concerns about the industry's pace of growth.

In the first quarter of 2024, electric car sales grew by around 25% compared with the first quarter of 2023. The market share of electric cars could reach up to 45% in China, 25% in Europe and over 11% in the United States, underpinned by competition among manufacturers, falling battery and car prices, and ongoing policy support.

The public charging stock increased by more than 40% in 2023, and the growth of fast chargers – which reached 55% – outpaced that of slow chargers. At the end of 2023, fast chargers represented over 35% of public charging stock. Both the AFIR regulation in Europe, and the NACS in North America, are examples of legislation enacted to enhance interoperability of the charging infrastructure.

Shared mobility services - a communal journey

The rise of shared mobility services represents another cornerstone of the mobility revolution, redefining the concept of ownership. Ride-sharing, bike-sharing, and car-sharing platforms have proliferated in urban centers worldwide, offering commuters flexible, cost-effective alternatives to traditional car ownership. [Deloitte's](#) insights shed light on shifting consumer preferences, with millennials and urban dwellers increasingly eschewing car ownership in favor of shared mobility options.

Cities like Singapore, Berlin, Copenhagen, and Paris are leading the charge in embracing shared mobility solutions, integrating various modes of transportation into seamless, interconnected networks. These mobility hubs prioritize active transportation modes such as walking and cycling, fostering healthier, more sustainable urban environments for residents and visitors alike.



Autonomous vehicles - driving towards the future

Alongside the electrification wave, autonomous vehicles (AVs) are charting a course towards the future of mobility. These self-driving marvels could redefine transportation, offering enhanced safety, efficiency, and accessibility on roads around the world. Companies like Waymo, Tesla, and Toyota are at the forefront of AV innovation, investing billions in research and development to bring autonomous driving to the masses.

McKinsey's prognostications paint a compelling picture of the AV's transformative potential, envisioning a world where household vehicle ownership dwindles in the wake of on-demand autonomous rides. As AV technology continues to mature and regulatory frameworks evolve, the dream of fully autonomous transportation inches closer to reality, beckoning a future where human drivers are relegated to history books.

"Passenger vehicles in Europe and North America will have an increased amount of level-three and level-four automation features, which will make them highly automated or capable of self-driving on highways by 2025. Major urban areas, such as Beijing, London, and New York, could become top markets for shared autonomous vehicles, given the large pool of potential customers in these locations," states a [new report by McKinsey](#).

Smart cities

The concept of the smart city has emerged as a core part of sustainable urban mobility. Singapore's Punggol Digital District, Copenhagen's Nordhavn redevelopment, and Dubai's integrated metro stations exemplify the fusion of technology and urban planning, creating vibrant, interconnected

urban ecosystems where transportation is seamless and sustainable.

By investing in smart mobility solutions, cities are tackling pressing challenges such as congestion, air pollution, and urban sprawl head-on. Smart traffic management systems, electric vehicle charging infrastructure, and pedestrian-friendly urban design are just some of the tools in the smart city arsenal, paving the way for a more livable, resilient urban future.



How are OMCs adapting to these changes?

Shell defines mobility hubs as standalone locations where customers primarily charge or fuel their vehicles, offering a range of low carbon fuels like EV, hydrogen, and pure biofuel. These strategically located sites integrate different transportation options such as buses, bicycles, and ride-sharing cars, providing commuters with seamless transitions between modes.

One key role of mobility hubs is to improve connectivity within urban areas by consolidating transportation options. By bringing together various modes of transportation, including micro-mobility options like e-scooters and bike-sharing services, these hubs offer commuters convenient and sustainable choices for shorter distances

“By 2030, it’s likely that no single fuel type will dominate road transport globally. That’s why, as part of the transition to cleaner mobility, Shell is increasingly investing in mobility hubs to ensure we can continue to meet the needs of customers in a multi-fuel and multi-modal world,” states Xifeng Xu, SVP Mobility Network at Shell, on their website.

In addition to turning their urban stations into mobility hubs, companies like Repsol, Aral and Eni are quickly expanding the reach of their loyalty apps. Repsol’s Waylet is one of Spain’s most popular

mobility apps with 7,5 million users.

As the mobility revolution unfolds, the world stands on the cusp of a transportation renaissance. From electric vehicles and autonomous driving to shared mobility services and smart cities, the pillars of change are firmly in place. As cities, companies, and consumers alike embrace the possibilities of the mobility revolution, service stations will have to be nimble and smart to ensure they play a significant role.

Written by Oscar Smith Diamante